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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,158	05/04/2006	Bob Baoguo Xue	GNV-004-US	2986
65159 7590 03/31/2009 BIO TECHNOLOGY LAW GROUP C/O PORTFOLIOIP P.O. BOX 52050 MINNEAPOLIS, MN 55402				
EXAMINER				
CHEN, SHIN LIN				
ART UNIT		PAPER NUMBER		
1632				
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03/31/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,158

Applicant(s)

XUE, BOB BAOGUO

Examiner

Shin-Lin Chen

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/86)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, 15 and 16, drawn to an isolated polynucleotide consisting of a MNTF associated nucleic acid sequence selected from the group consisting of SEQ ID No. 1, a fragment of SEQ ID No. 1, SEQ ID No. 2, a fragment of SEQ ID No. 2, a nucleic acid sequence complementary to SEQ ID No. 1 or a fragment thereof, and a nucleic acid sequence complementary to SEQ ID No. 2 or a fragment thereof, or the nucleic acid sequence of SEQ ID Nos. 3-8, 10-12, or a fragment of SEQ ID No. 1 comprising at least one open reading frame encoding a polypeptide selected from the group consisting of SEQ ID Nos. 13-32.

Group II, claim(s) 13 and 14, drawn to an isolated MNTF associated polypeptide encoded by an open reading frame of SEQ ID No. 1 and a fusion protein comprising an MNTF associated polypeptide linked to a heterologous protein.

Group III, claim(s) 17, drawn to a method for determining the presence of a MNTF associated polynucleotide in a medium by contacting the medium with a synthesized and isolated oligonucleotide which hybridizes with said MNTF associated nucleic acid sequence.

Group IV, claim(s) 18, 19 and 22, drawn to a method of comparing the relative abundance of MNTF associated expression products in different samples by using nucleic acid probe, wherein the expression product is MNTF RNA.

Group V, claim(s) 18, 20 and 21, drawn to a method of comparing the relative abundance of MNTF associated expression products in different samples by using antibody, wherein the expression product is MNTF associated polypeptide.

Group VI, claim(s) 23, drawn to a panel for use in hybridization assays comprising two or more polynucleotides according to claim 1 stably associated with the surface of a solid support.

It should be noted that the claims (most recently) filed on 5-4-06 has been used for the restriction requirement. The original claim 22 appears to be a typographical error and has been renumbered as claim 21. There are two "claim 23" and one "claim 23" has been renumbered as "claim 22".

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special

technical features for the following reasons: The putative special technical feature common to groups I-VI is a fragment of SEQ ID No. 1, a fragment of SEQ ID No. 2, or the nucleotide sequence of MNTF1. Chau, R., M.W., 2001 (US Patent No. 6,309,877 B1) discloses nucleotide sequence of MNTF1-1443 DNA fragment (SEQ ID No. 1) which encodes the MNTF1-F3 protein and the DNA sequence of MNTF1-927 DNA fragment (SEQ ID No. 2) which encodes the MNTF1-F6 protein, the amino acid sequence of MNTF1-F3 protein (SEQ ID No. 3) and the amino acid sequence of MNTF1-F6 protein (SEQ ID No. 4) (e.g. column 3, lines 34-56). It is apparent that there is no special technical feature that is contributed over the prior art by the instant invention. Thus, Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1.

Upon election of one group, further restriction is required. Applicant is required to select a **single** SEQ ID No. for examination. The claimed polynucleotide sequences appear to encompass cut and paste of noncontiguous fragments from SEQ ID No. 1 or 2. Polynucleotide sequences of SEQ ID Nos. 1-8 and 10-12 lack common properties and have different functions or uses. The amino acid sequences of SEQ ID Nos. 13-32 represent different open reading frames encoding different proteins that lack common properties and have different functions and uses. Examination of various SEQ ID numbers would impose serious search burden on examiner. Therefore, applicant is required to elect a single SEQ ID No. for examination. It is noted that this is a restriction requirement rather than an election of species.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

3. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected

process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Lin Chen whose telephone number is (571) 272-0726. The examiner can normally be reached on Monday to Friday from 9:30 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras can be reached on (571) 272-4517. The fax phone number for this group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Shin-Lin Chen, Ph.D.
/Shin-Lin Chen/
Primary Examiner
Art Unit 1632